

Mr. Frank Hezoucky
Hendrickson Trailer Suspension System
2070 Industrial Place S. E.
Carlton, OH 44707-2600

Re: 011-15223
Minor Source Modification to:
Part 70 permit No.: T 011-11925-00037

Dear Mr. Hezoucky:

Hendrickson Trailer Suspension System was issued Part 70 operating permit T 011-11925-00037 on October 2, 2000 for the operation of paint booths for trailer parts. An application to modify the source was received on November 28, 2001. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) A touch-up paint booth, with a maximum production rate of 21.47 trailer parts per hour, using dry filter as control, exhausting at stack # 3.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall

not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction and operation when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

mm

cc: File - Boone County
Boone County Health Department
Air Compliance Section Inspector - Marc Goldman
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Hendrickson Trailer Suspension Systems
180 Mount Zion Road
Lebanon, IN 46052**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

First Minor Source Modification No.: T011-15223-00037	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

D.2 FACILITY OPERATION CONDITIONS - Insignificant Activities - Grinding and Welding . . 32

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Compliance Determination Requirements

D.2.2 Particulate Matter (PM)

D.3 FACILITY OPERATION CONDITIONS - Insignificant Activities - Degreasing

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control
[326 IAC 8-3-5]

D.4 FACILITY OPERATION CONDITIONS - Touch-Up Paint Spray Booth34a

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9] and HAPS Major Sources: New
Source Toxics Control [326 IAC 2-4.1-1]

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2]

D.4.3 Major Sources of Hazardous Air Pollutants [326 IAC 2-4.1]

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.4.5 Volatile Organic Compounds (VOC)

D.4.6 VOC Emissions

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.7 Particulate Matter (PM)

D.4.8 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.9 Record Keeping Requirements

Certification

Emergency/Deviation Occurrence Report

Quarterly Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary metal finishing plant for trailer suspension systems.

Responsible Official:	Joseph M. Ross
Source Address:	180 Mount Zion Road, Lebanon, IN 46052
Mailing Address:	180 Mount Zion Road, Lebanon, IN 46052
Phone Number:	765-483-5362
SIC Code:	3714
County Location:	Boone County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) paint spray booth, identified as EP-2, with a maximum production rate of 21.47 trailer parts per hour, using a dry filter as control, exhausting at Stack 1, identified as S-1.
- (b) One (1) paint spray booth, identified as EP-9, with a maximum production rate of 16.91 trailer parts per hour, using a dry filter as control, exhausting at Stack 2, identified as S-2.
- (c) One (1) touch-up paint booth, with a maximum production rate of 21.47 trailer parts per hour, using dry filter as control, exhausting at stack # 3.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Grinding and machining operation controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following; deburning, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations. (Two belt grinders, identified as EP-4, each connected to a cyclone separator and a baghouse)

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) touch-up paint spray booth

One (1) touch-up paint spray booth, with a maximum production rate of 21.47 trailer parts per hour, using a dry filter as control, exhausting at Stack 3, identified as S-3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the touch-up paint spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the surface coating shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.4.3 Major Sources of Hazardous Air Pollutants [326 IAC 2-4.1]

Any change or modification which would increase the potential to emit for the paint booth of a single hazardous air pollutant (HAP) to ten (10) tons per year or more or a combination of HAPs to twenty-five (25) tons per year or more shall obtain prior approval from IDEM, OAQ and may be subject to the requirements of 326 IAC 2-4.1.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.4.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.4.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.4.6 VOC Emissions

Compliance with Condition D.4.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Hendrickson Trailer Suspension System

Page 5 of 5

Lebanon, Indiana

Minor Source Modification No.:011-15223-00037

Permit Reviewer: Madhurima D. Moulik

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.7 Particulate Matter (PM)

Pursuant to 326 IAC 6-3-2, the dry filter for PM control shall be in operation at all times when the touch-up paint booth is in operation.

D.4.8 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filter. To monitor the performance of the dry filter, weekly observations shall be made of the overspray from the surface coating booth stack S-3 while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.9 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC limits established in Condition D.4.1 and that the HAP PTEs are below the levels noted in Condition D.4.3.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The cleanup solvent usage for each month;
 - (3) The total VOC usage for each month;
 - (4) The total single HAP usage for each month; and
 - (5) The total HAP usage for each month.
- (b) To document compliance with Condition D.4.8 the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification

Source Background and Description

Source Name:	Hendrickson Trailer Suspension Systems
Source Location:	180 Mount Zion Road, Lebanon, IN 46052
County:	Boone
SIC Code:	3714
Operation Permit No.:	T011-11925-00037
Minor Source Modification No.:	011-15223-00037
Permit Reviewer:	Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed a modification application from Hendrickson Trailer Suspension Systems relating to the construction of the following emission units and pollution control devices:

- (a) A touch-up paint booth, a maximum production rate of 21.47 trailer parts per hour, using dry filter as control, exhausting at stack # 3.

History

1. CP011-4304-00037 was issued on May 11, 1995 for the construction and operation of Paint Spray Booth 1, identified in the Part 70 Operating Permit as EP-2.
2. CP011-6704-00037 was issued on December 20, 1996 for an increase in maximum production capacity for Paint Spray Booth 1, identified in the Part 70 Operating Permit as EP-2.
3. CP011-8677-00037 was issued on November 14, 1997 for the construction and operation of Paint Spray Booth 2, identified in the Part 70 Operating Permit as EP-9.
4. Significant Source Modification and Part 70 Operating Permit No. T011-11925-00037 was issued on October 2, 2000.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 28, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	6.88
PM-10	6.88
SO ₂	Negligible
VOC	11.42
CO	Negligible
NO _x	Negligible

HAP's	Potential To Emit (tons/year)
Toluene	3.51
Methyl Isobutyl Ketone	2.60
Methyl Ethyl Ketone	0.06
Hexane	0.02
Xylene	0.02
TOTAL	6.22

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. The Minor Source Modification is being performed pursuant to 326 IAC 2-7-10.5(d)(4)(B)(iii), which states that Minor Source Modification can be used for modifications that have the potential to emit “less than twenty-five (25) tons per year and equal to or greater than ten (10) tons per year of volatile organic compounds”.

County Attainment Status

The source is located in Boone County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Boone County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Boone County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Potential To Emit (tons/year) ¹
PM	207
PM-10	207
SO ₂	0
VOC	269
CO	2
NO _x	10

HAP's	Potential To Emit (tons/year) ¹
Toluene	greater than 25
MIBK	less than 10
TOTAL	greater than 25

¹ Based on Technical Support Document for Significant Source Modification and Part 70 Permit No. T011-11925-00037

- (a) This existing source is a major stationary source because at least one attainment regulated pollutant is emitted at a rate of 250 tons per year.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)		
Process/facility	PM	PM-10	VOC

Touch-Up Paint Booth	0.68	0.68	11.42
PSD Significant Threshold	25	15	40

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) The New Source Performance Standards (NSPS) (40 CFR 60 Subpart MM) is applicable to “automobile or light duty truck assembly plant”. This source is a vehicle body manufacturing operation. Subpart MM contains no definition of an “automobile or light duty truck assembly plant”. The dictionary definition of assembly is “the fitting together of manufactured parts into a complete machine, structure, or unit of a machine”. This operation does not perform any assembly work. Therefore this rule does not apply.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source modification.

State Rule Applicability - Entire Source

The state rule applicability has not changed as a result of the minor source modification.

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on February 23, 2000. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM10 and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

The state rule applicability has not changed as a result of the minor source modification

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the touch-up paint spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the paint spray booths are in compliance with this requirement.

326 IAC 2-4.1-1 (HAPS major sources: new source toxics control)

The PTE of any single HAP at the touch-up paint booth is less than 10 tons per year, and the PTE of combined HAPs is less than 25 tons per year. Therefore, the 326 IAC 2-4.1-1 does not apply to the touch-up paint booth.

326 IAC 6-3-2 (Process operations: particulate emission limitations)

- (a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the surface coating operation at the touch-up paint booth shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filter shall be in operation at all times the surface coating processes are in operation, in order to comply with this limit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The surface coating processes have applicable compliance monitoring conditions as specified below:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (S-1, S-2, and S-3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the surface coating processes must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 011-15223-00037.

**Appendix A: Emissions Calculations
VOC and Particulate
From Touch Up Paint Booth**

Company Name: Hendrickson Trailer Suspension Systems
Address City IN Zip: 180 Mount Zion Road, Lebanon, IN 46052
Permit #: T011-15223-00037
Reviewer: Madhurima D. Moulik

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Touch-Up Paint Booth																
Black Enamel	12.1	28.90%	0.0%	28.9%	0.0%	71.00%	0.03400	21.470	3.50	3.50	2.55	61.26	11.18	6.88	4.93	75%
Thinner	7.1	100.00%	0.0%	100.0%	0.0%	0.00%	0.00036	21.470	7.10	7.10	0.05	1.32	0.24	0.00		75%

State Potential Emissions

Add worst case coating to all solvents

PTE =	2.61	62.58	11.42	6.88
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METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

HAPs - Surface coating**Touch-up Booth****Company Name: Hendrickson Trailer Suspension Systems****Address City IN Zip: 180 Mount Zion Road, Lebanon, IN 46052****CP: 011-15223****Pit ID: 057-00037****Reviewer: Madhurima D. Moulik****Date: Dec 12, 2001**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Weight % MIBK	Toluene Emissions (ton/yr)	MIBK Emissions (ton/yr)
Black Paint	12.09	0.03	21.47	8.80%	6.70%	3.40	2.59

Potential to Emit =

3.40	2.59
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HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

<----- PTE (tons per year) ----->															
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Toluene ¹	Weight % MEK ¹	Weight % Hexane ¹	Weight % Xylene ¹	Wt. % MIBK ¹	Wt. % Ethylbenzene ¹	Toluene	MEK	Hexane	Xylene	MIBK	Ethylbenzene
Thinner	7.1	0.00036	21.47	45.00%	25.00%	10.00%	7.50%	4.00%	2.00%	0.11	0.06	0.02	0.02	0.01	0.00

¹ Average content from MSDS

	Toluene	MIBK	MEK	Hexane	Xylene	Ethylbenzene	Comb. HAPS
Total HAPs PTE	3.51	2.60	0.06	0.02	0.02	0.00	6.22